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BRINGING PARTIALITY TO LIGHT: QUESTION WORDING AND CHOICE AS INDICATORS OF BIAS

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It is argued that automatic linguistic behavior is an important process contributing to the mediation of expectancy effects in interview situations. An experimental study supported the hypothesis that participants' expectations about who caused a rape incident lead them to choose questions in which the question verb implied the agentic role of the person corresponding to their expectations (rather than identical questions that imply the opposite to their expectations). The implications of these findings for social hypothesis testing are discussed.

Consider being involved in the investigation of a critical event, such as a rape case. You have to find out, by interrogating both the victim and the perpetrator, as much as you can about the circumstances and the events that led to the incident. You aim to form an objective opinion of how the events unfolded and what led to what. How does one choose and formulate one's questions judiciously to uncover the facts without blurring one's judgment with unintentional aspects of the interview such as the semantic or syntactic features of the questions? Consider, for instance, the following situation. On the evening in question the victim and the perpetrator were at a party where they met and supposedly danced. You want to know whether this event did or did not take place and are asking the victim. To do so, you have a number of options. You can ask the victim whether (a) *she* danced with the perpetrator, whether (b) the *perpetrator* danced with her, or whether (c) the two of them danced with each other.

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Although you expect the victim's answer to be "yes" in either case, research on the causality implicit in interpersonal verbs (e.g., Au, 1986; Brown & Fish, 1983; Fiedler & Semin, 1988; Kasoff & Lee, 1993; Semin & Marsman, 1994) suggests that if the victim occupies the sentence subject position in a question depicting an action (Question a) then she is more likely to be perceived as the causal originator of the event. If she is in the sentence object position (Question b), then it is more likely that one will form the opinion that the perpetrator is the causal originator of the event. The most unbiased choice is the third option (Question c). The experiment that we report in this paper addresses whether people's expectations about a victim's trustworthiness influences their choice of questions with a particular formulation (e.g., "Did you dance with him?") over another (e.g., "Did he dance with you?") in an interview situation.

The focus of the research we report here is the following: How do the expectations one has about a target influence one's choice of question wording? In other words, how do people's expectations drive their linguistic behavior? More specifically, we propose a theoretical framework for a language driven process that may contribute to the shaping of expectancy effects by investigating variations in the use of an implicit inferential property of interpersonal verbs (cf. Semin, 1997; Semin & Marsman, 1994). The research we report here is at the crossroads of three of traditions in social psychology. First, its intellectual origins derive from the "causality implicit in interpersonal verbs" (cf. Brown & Fish, 1983; Semin, 1997) whereby the specific research focus and design are inspired by the Question-Answer paradigm (Semin & DePoot, in press; Semin, Rubini, & Fiedler, 1995). The second tradition has to do with the relationship of question wording to social-cognitive processes (cf. Loftus, 1979; Schwarz, 1996; Tanur, 1992), and the third is the research on social hypothesis testing that relies on a question selection paradigm (see Olson, Roese & Zanna, 1996; Snyder & Swann, 1978; Swann, Guiliano, & Wegner, 1982; Trope & Liberman, 1996). Finally, the overarching theme is to be found in the notion of self-fulfilling prophecies (Merton, 1948), namely the confirmation of inaccurate expectations in behavioral interaction (e.g., Snyder, Tanke, & Berscheid, 1977).

Linguistic behavior is a fundamental feature of information-gathering activities in which people engage as a consequence of their expectations. Such linguistic behavior is a common feature of a great variety of social situations and contexts—namely those contexts in which the formulation of a question about interpersonal events is of the essence. Questions about what happened, who did what, why, when, etc. are integral to any exchange about interpersonal events. Identifying the linguistic tools that can serve expectancy effects or confirmatory biases as well as how they are used means uncovering one of the central mediational processes that

transmit and maintain such biases across a great variety of communicative contexts.

The research on confirmatory biases (Snyder & Swann, 1978; Semin & Strack, 1980) is methodologically similar to the research procedure that we employed, using question choice as an indicator of bias. The difference from earlier research, however, is that our focus is on how people's expectations drive their linguistic behavior. In other words, a person's expectations will influence his or her choice of question *formulation* rather than his or her preference of one type of *content* (e.g., questions about extroversion) over another (e.g., questions about introversion). More specifically, the issue here is whether people have a systematic preference for a particular wording or formulation of a question over another as a function of their expectation set, given that both questions actually inquire about the same semantic content. We therefore focus on a specification of the preferential linguistic behavior that is responsible for the effects of expectancy processes.

We advance a model of information seeking linguistic behavior that implies causal agency in interpersonal events. This model is derived from the Question-Answer paradigm (Semin & De Poot, in press; Semin, Rubini, & Fiedler, 1995) and suggests that the expectations that interviewers have about the agency of their targets will drive their question formulation preferences. The theoretical framework of the question-answer paradigm is derived from research evidence that states that the types of semantic roles cued by interpersonal verbs (e.g., help, cheat, kick, hate, like, etc.) systematically influence the perceived agency for an interpersonal event (see Brown & Fish, 1983; Kasoff & Lee, 1993; Semin, 1997; Semin & Marsman, 1994). This domain consists of interpersonal verbs that describe *actions* (help, push, cheat, surprise) or psychological *states* (love, hate, abhor). Essentially, a variety of authors were able to demonstrate that verbs of action and verbs of state systematically mediate inferences about who initiates an event. Indeed, this is probably the most widely researched aspect of interpersonal verbs (e.g., Au, 1986; Brown & Fish, 1983; Fiedler & Semin, 1988; Kasoff & Lee, 1993; Semin & Marsman, 1994). When asked to identify who initiated an event described in a simple subject-verb-object sentence constructed with an action verb (e.g., John helped David), participants predominantly identify the sentence subject (John). In contrast, for sentences with state verbs (John likes David), the same question leads to sentence object inferences (David). (This particular inference pattern about event initiation is also known as "the causality implicit in interpersonal verbs," cf. Brown and Fish, 1983.)

The causality implicit in interpersonal verbs acquires a practically significant meaning within the context of question-answer situations. If a questioner believes that the target (e.g., the victim) played an agentive

role in initiating an event, then he or she is likely to prefer question formulations with action verbs where the target occupies the sentence subject position ("Did *you* dance with him?") over action verb questions where the target is in the question object position ("Did he dance with you?"). In contrast, if the questioner does not expect the target to have played an agentive role in bringing about the event in question, then participants will prefer action verb questions in which the target is in the sentence object position ("Did he dance with you?") over questions in which the target is in the sentence subject position. The reverse preferential question formulation pattern is expected for questions formulated with state verbs.

Linguistic behavior is in general difficult to monitor deliberately for a number of reasons. First, reflecting on habituated behaviors usually leads to a breakdown of their uninterrupted flow. Second, highly habituated behaviors escape reflection because people generally are unable to access the precise implicative features (such as causal agency) of such behavior. Finally, the causality implicit in interpersonal verbs is precisely as qualified: implicit. This is a regularity of language that is not deliberately monitored unless one's attention is drawn to it.

These considerations give rise to two questions. The first is whether an expectation manipulation will influence the monitoring of linguistic behavior? The second is whether expectations drive such behavior in a habitual and, therefore, automatic manner or is such behavior deliberately monitored? To be able to differentiate between these alternatives we considered two possible methods of inducing expectations about the victim and perpetrator. These were *direct* and an *indirect* expectation induction procedures. In the direct expectation induction, participants were instructed to play the role of an investigating officer with one of three role requirements: In the first condition the "investigating officer" was instructed to play the role of an interviewer who regarded the victim as untrustworthy. In the second condition the investigating officer was instructed to play the role of an interviewer who regarded the victim as trustworthy. In the third condition no such instructions were given (neutral). The indirect expectation condition was accomplished by modifying a desk sergeant's report about the victim across conditions (trustworthy, untrustworthy, and neutral). This was presented as part of the overall information that the participants received, and was varied across the three conditions. The desk sergeant reported her impressions of the victim and mentioned in the first condition that she had the impression that this was a case of rape, in the second condition that the woman left a somewhat untrustworthy impression, and in the third condition no such information was supplied.

While the direct expectation induction procedure introduced the possibility of deliberately monitoring question formulation choice, the indi-

rect expectation induction procedure introduced the possibility of an automatically monitored linguistic behavior. The predicted outcome was that, because linguistic behavior is habitually driven, the expectations about the victim would influence question formulation choices whether the expectations were induced directly or indirectly. If such linguistic behavior is automatic and not deliberate, then it can also be hypothesized that question choice biases perceived by participants should not be related to actual biases in question formulation choices.

METHOD

PARTICIPANTS

Ninety-seven students (46 men and 51 women) volunteered to take part in this experiment on a paid basis. They were informed in advance that the study would be dealing with a rape case. All participants were willing to take part in the experiment.

PROCEDURE

All participated individually. they were told that their task was to take the role of an investigating officer and to interview a victim who claimed to be raped. They were told that they would be conducting this interview over the computer, in an interactive session. After some instructions about how to use the computer they were informed that they would see a set of two or three alternative questions at a time on the computer screen and they would have to choose the one that they would like to pose to the victim. Her answers would then appear on the screen. Furthermore, they were told that their question choice would not only influence the type of answer, but also the next set of questions choices that they would receive. In total, they had 98 such choice points and the answers were always identical irrespective of the question they selected. Further, participants were told that the interview questions that they were to receive were generated from a database of standard investigating procedures of rape incidents.

EXPECTATION INDUCTION PROCEDURES

Expectations about the victim were induced either directly or indirectly. Within the direct induction conditions, participants' expectations regarding the victim's trustworthiness were manipulated across three subconditions in the following manner: In the trustworthy condition, participants were told to play the role of a investigating officer who was very positively oriented toward the victim, was convinced that the woman was telling the

truth, and that as far as the officer was concerned, this was a clear-cut case of rape. They were also told that they were to regard the accused as the responsible party and the woman as the victim. In the untrustworthy condition, participants were told that they were to enact the role of an officer who was suspicious of the victim and was not positively oriented toward her. Indeed, this officer did not think that there was any question of rape at all and was convinced that the victim was untrustworthy. Further, the role required that the victim be regarded as the responsible party and that the accused was innocent. Participants in the neutral condition were instructed that their role as an investigating officer required them to enact an entirely neutral attitude. They had to play the role under the assumption that both the victim and the accused had to be given a fair chance. They were told to focus on the potential responsibility of both the victim and the accused for the incident.

After being informed about the role that they were expected to enact, participants in the direct expectation induction conditions received an information digest that was supposedly prepared by the desk sergeant after the victim had reported the rape. This information digest contained personal data about the woman and some general information about the incident.

The indirect expectation induction was accomplished by providing the participants with advance information about the victim that consisted of an information digest that was taken down by the desk sergeant to whom the victim had made her complaint. Aside from containing general personal data about the victim and the incident that was identical across conditions, it also contained information that varied across the three conditions of the indirect expectation induction. In the trustworthy condition, the desk sergeant reported that the woman came across as extremely confused, anxious and naive. Further, she reported that, in her view, the complaint was justified and that she was under the impression that this was a case of rape. In the untrustworthy condition the desk sergeant reported that she did not know what to think about this case, and that she was under the impression that the woman had probably contributed to the creation of the situation and that she gave an untrustworthy impression. The desk sergeant added that the woman had once before come in with a complaint (not rape-related) and that this complaint had turned out to be a false one. Finally, in the neutral condition, the desk sergeant reported that after having the woman's consent, she contacted the perpetrator. He had reported that the events that unfolded on the particular evening had taken place with the consent of the woman and that he was under the impression that he (the perpetrator) had not acted in any way against the wishes of

the woman. Further, the desk sergeant reported that she was under the impression that both the victim and the alleged perpetrator were trustworthy.

The indirect expectation induction information was introduced prior to the interrogation and appeared on the computer screen as a formal document that was part of the documentation in the case. Because this manipulation was critical, we piloted the desk sergeant's reports with 69 independent participants allocated randomly to either the trustworthy or untrustworthy conditions. These participants received the indirect expectation induction information and had to fill out 14 nine-point scales, some of which tapped the degree to which the man was responsible for the event, the degree to which the incident was judged to be serious, and the degree to which the woman provoked the event. The factor analysis of the 14 responses yielded two reliable factors that we—for convenience's sake—labelled male and female responsibility. The male responsibility scale consisted of 7 items and with a Cronbach's alpha of .85. The scales referred to the degree to which: (1) the man forced the woman to have sexual contact, (2) the man was responsible for the incident, (3) the incident was judged to be an actual rape incident, (4) the rape accusation was judged to be fake (reverse coding), (5) it was likely that the man would do the same thing again, (6) the man was likely to be condemned, and (7) the man had acted like any other man in the same situation.

The female responsibility scale also consisted of seven items and had a Cronbach's alpha of .80. The items tapped the degree to which: (1) the woman was responsible for the incident, (2) the woman acted in the way any other woman would have acted prior to the incident, (3) the woman could have avoided being raped, (4) the woman was careless, (5) it was likely that the woman would be raped again, (6) the incident was a serious one, and (7) the woman had acted like any other woman during the incident.

The ANOVA with the two scales as a within subjects factor (male vs. female responsibility) and expectation set (trustworthy vs. neutral vs. untrustworthy) as the between subjects factor yielded the expected significant interaction between these two factors, $F(2,66) = 15.95; p < .01$. The post hoc, planned mean comparisons confirmed that the expectation set manipulations were successful. The victim had the lowest responsibility rating in the trustworthy condition ($M = 4.49$) and the highest rating in the untrustworthy condition ($M = 5.65$) with an intermediate rating in the neutral condition ($M = 4.92$). The respective pattern of judgments was reversed for the perpetrator ($M_{\text{trustworthy}} = 6.43$; $M_{\text{neutral}} = 5.16$; $M_{\text{untrustworthy}} = 4.55$).

THE RAPE INCIDENT

In order to have potentially credible expectations, we used a rape case that was as ambiguous as possible. The case was based on one of six incidents used in prior research based on the training of actual vice squad officers. For the first case, we had 30 different interrogation transcripts available. Each had been conducted by a different investigating officer. In a previous study the incident that was chosen had been rated as the most ambiguous of those used, judged as highly realistic, and easily imaginable (De Winter & Mutsaers, 1990). The final material we used in our experiment consisted of 98 question-answer pairs. Of these, 24 constituted the dependent variables and 74 were filler-items.

DEPENDENT VARIABLES

The main dependent variable consisted of 20 pairs of questions worded with action verbs. The options in each case varied the victim and the accused between the logical sentence subject and logical sentence object positions. This was particularly easy in the case of questions worded with action verbs that allowed symmetry, such as:

Option 1a: Did you dance with Peter on that evening?

Option 1b: Did Peter dance with you on that evening?

Answer 1: Yes, shortly before we left.

In most action verb cases such symmetry is not easily obtained. Therefore, most of the question pairs were constructed with complementary verbs, such as:

Option 2a: Did you ask Peter how many rooms he had?

Option 2b: Did Peter tell you how many rooms he had?

Answer 2: No, I did not know how many rooms he had.

For all 20 items that constituted the dependent variable used in this study the following coding procedure was adopted: If the participant chose questions where the victim was in the sentence subject position (i.e., 1a, and 2a), then these choices were coded as implying the agency of the victim. If, however, options 1b and 2b were chosen (accused in the sentence subject position), then they were coded as implying the causal agency of the accused.

In a factual interrogation, it is very difficult to formulate questions with state verbs. We therefore had only four question-pairs that were worded with verbs of state. For instance:

Option 3a: Did you have the impression that Peter trusted you?

Option 3b: Did you trust Peter?

Answer 3: Yes.

Additionally, there was a large number of items that were non-diagnostic from the point of view of the hypothesis. Some of these questions were constructed such that they provided participants with options of more polite or impolite, direct or indirect, detailed and brief forms of questions about the same issue. For instance:

Option 4a: I can imagine that you might find this a rather awkward question, but why did you not get out of the bed at that point in time?

Option 4b: Why on earth did you not get out of bed at that point in time?

Answer 4: I was very frightened by Peter. I thought I could explain to him that this was not what I wanted. I was afraid that he would become violent if I tried to get out of bed.

Other non-diagnostic questions were different formulations inquiring about the victim's personal data (How old are you? vs. When were you born?, etc.)

PERCEIVED OBJECTIVITY MEASURES

Subsequent to the interrogation, participants were asked to answer three questions on 9-point Likert scales. First, they were asked to answer the degree to which they had been neutral during the interrogation; second, they were asked to answer the degree to which they thought that they had asked leading questions; and finally, they were asked to answer the degree to which their question choices were made deliberately. These three questions constituted a manipulation check in the case of the direct Expectation Induction conditions. In the indirect Expectation Induction conditions the same questions served as an index of the degree to which participants were deliberately monitoring their question formulation choices. Of course, these questions also provided a check on the direct versus indirect Expectation Induction procedures.

RESULTS

MANIPULATION CHECKS

We begin by reporting on the three types of manipulation checks. First, we analysed the questions concerning the degree to which participants thought that they deliberately chose specific questions. An ANOVA of this manipulation check variable as a function of *Expectation Induction*

(Direct vs. Indirect), *Expectation about the Victim* (Trustworthy vs. Neutral vs. Untrustworthy) and *Sex* of participant did not yield any significant effects, $F(2,91) < 1.00$. All participants tended to think that they had been deliberate in monitoring their question choice ($M = 7.15$; $SD = 0.87$).

The question concerning neutrality during the interrogation gave rise to the expected significant interaction between Expectation Induction and Expectation about the Victim, $F(2,91) = 115.73$; $p < .01$. Participants in the neutral direct induction condition ($M = 7.69$; $SD = .63$) as well as all the indirect induction conditions ($M_{\text{trustworthy}} = 7.29$; $SD = .90$; $M_{\text{neutral}} = 7.44$; $SD = .86$; $M_{\text{untrustworthy}} = 7.58$; $SD = .77$) indicated their neutrality. In contrast, participants in the direct trustworthy ($M = 2.85$; $SD = .56$) and direct untrustworthy conditions indicated that they were not neutral (2.23 ; $SD = .73$). It was interesting to note that participants in the trustworthy condition regarded themselves to be relatively more neutral than those in the untrustworthy condition as the post hoc analysis indicated ($p < .05$). Not surprisingly the main effect for Expectation about the Victim, $F(2,91) = 80.57$, and for Expectation Induction, $F(1,91) = 406.53$, were also significant, $p < .01$. No other effects were observed.

The third and final question concerned the degree to which participants perceived themselves to be choosing leading questions. Again, the expected second order interaction was significant, $F(2,91) = 51.43$; $p < .01$. Participants in all the indirect induction conditions ($M_{\text{trustworthy}} = 2.43$; $SD = .87$; $M_{\text{neutral}} = 2.28$; $SD = .85$; $M_{\text{untrustworthy}} = 2.16$; $SD = 1.02$) and the neutral direct induction condition ($M = 2.23$; $SD = .93$) regarded themselves as not having posed any leading questions at all. In contrast, in the direct trustworthy ($M = 5.46$; $SD = .88$) and direct untrustworthy condition ($M = 6.69$; $SD = .86$) the participants regarded their question choices as being predominantly leading, although participants in the direct untrustworthy condition regarded their questions as more leading than did participants in the direct trustworthy condition ($p < .05$). Further, the main effect for Expectancy Induction, $F(1,91) = 184.77$, and for Expectation about the Victim, $F(2,91) = 34.99$ were both significant, $p < .01$.

REFERENTIALITY OF QUESTION CHOICE

We conducted an ANOVA with three between subjects factors, namely *Expectation Induction* (Direct vs. Indirect), *Expectation about the Victim* (Trustworthy vs. Neutral vs. Untrustworthy) and *Sex* (Female vs. Male) of interrogator, to investigate the degree to which participants' expectations influenced their question choice on the experimental questions.

Since the number of questions referring to the agency of the victim or agency of the perpetrator was a constant (there were in total 24 such questions), we used only the number of questions referring to the agency

TABLE 1. Average Frequencies of Questions Implying the Agency of the Victim as a Function of *Expectation Induction* and *Expectation About Victim*

Expectation Induction	Direct		Indirect	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Expectation About Victim				
Trustworthy	5.15	3.67	9.68	4.08
Neutral	10.85	4.39	10.61	3.82
Untrustworthy	17.84	4.43	14.33	2.58

of the victim as the dependent variable. The expected outcome was a main effect due to *Expectation about the Victim*, which was significant, $F(2, 91) = 41.98$; $p < .001$. Further, the interaction between *Expectation about the Victim* and *Expectation Induction* was significant, $F(2, 91) = 8.92$; $p < .001$. A further, simple main effects analysis within *Expectation Induction* conditions revealed that *Expectation about the Victim* effects were significant both within the *direct*, $F(2, 92) = 36.49$; $p < .001$, as well as with the *indirect* induction conditions, $F(2, 91) = 8.48$; $p < .001$. As can be seen from Table 1, the differences are not as pronounced with the indirect induction procedure as they were with the direct induction procedure. The overall interaction indicates that those participants who are led to suspect the victim (untrustworthy condition) prefer choosing questions that imply the agency of the victim over questions that imply the agency of the accused. In contrast, participants who are led to trust the victim prefer to choose questions that imply the agency of the accused over questions that imply the agency of the victim. The neutral set participants display a fairly balanced choice of alternatives for their questions.

Separate analyses with the critical action verb questions and the critical state verb questions produced the same results. Because the mean patterns and post hoc comparisons were identical to those obtained for the overall analyses, we do not report separate means etc. for these subanalyses. No further significant effects were obtained.

CONSCIOUS MONITORING OF QUESTION TYPE¹

The manipulation check questions allow some insight into whether participants are able to monitor their question formulation choice deliberately, or if this is an automatic process. We know from the manipulation check data that in two of the direct *Expectancy Induction* conditions (trustworthy and untrustworthy conditions) participants reported: (a) not being neutral, and (b) having chosen leading questions. The question we addressed with this final analysis was whether question choice preferences were in any systematic way related to the perceived biases.

1. We would like to thank one of our anonymous reviewers for suggesting this analysis.

TABLE 2. Correlations Between *N* of Questions that had a Victim Causal Origin Reference and Perceived Deliberation, Neutrality and Bias in Question Choice

Expectation Induction	Expectation About the Victim	Deliberate	Neutrality	Leading
Indirect	Trustworthy	-.31	-.36	.02
	Neutral	.02	.20	.19
	Untrustworthy	-.02	-.20	-.09
Direct	Trustworthy	-.21	-.15	.39
	Neutral	-.44	.17	.13
	Untrustworthy	-.41	-.42	.09

A systematic relationship would be indicative of deliberate monitoring. To this end we examined the correlations between the number of victim agency implying questions they chose and the three perceived bias measures (i.e. degree to which subjects deliberately monitored their question choice; how neutral they had been; and degree to which they perceived themselves to choose leading questions). As can be seen in Table 2 none of these correlations were significant. What is more, the correlations were not even systematic. That is, in the untrustworthy condition all the correlations should have been positively signed, which they were not. In the trustworthy condition they should all have been negatively signed which they were not. Furthermore, the most relevant index (bias with regard to choosing leading questions) showed no indication whatsoever of a relationship.

DISCUSSION

The results of our experiment clearly suggest that, once participants have particular role expectations about the type of orientation they have to enact as an investigating officer, they systematically pick out the critically formulated questions that imply agentive directionality in line with their role demands. Thus, participants who are asked to enact the role of an interrogator who does not trust the victim systematically choose action and state verb questions in which the victim is in the causal agent position. The reverse is found in the case of interrogators who believe in the innocence of the victim. They preferentially choose questions in which the perpetrator is in the agentive position. Thus, it would seem to be the case that participants are able to detect or choose those questions that direct the agency in each question in line with their instructed roles. More importantly, we find that an indirect manipulation of the interviewer's expectations embedded within the general information that participants receive is sufficient to induce the selection of question formulations that are

consistent with expectations. This is the first indication of an automatic process guiding the selection of question formulation.

This experiment also offered the possibility of a more direct examination as to whether question formulation choices are deliberately monitored or automatic. An analysis of the perceived biases in choosing leading questions and participants question formulation preferences yielded no systematic relationship. Although subject to the usual caveats about all null results, these results suggest that even though participants think that they display bias in certain conditions, these biases have nothing to do with their question formulation preferences. Effectively, this suggests that subjects do not deliberately monitor peculiarities of the subtler aspects of their linguistic behavior—a conclusion that is in line with earlier research into the lack of conscious access to the processes involved in the production of specific outcomes (Nisbett & Wilson, 1977) despite its controversial history (e.g., Smith & Miller, 1978; Turner, 1988; Wilson & Stone, 1985).

GENERAL DISCUSSION AND CONCLUSIONS

The experiment that we have reported complements previous research with the question-answer paradigm (De Poot & Semin, 1995; Semin & De Poot, *in press*; Semin, Rubini & Fiedler, 1995) and suggests a particular model of how automatic linguistic behavior may be involved in the mediation of expectancy effects. The first step in this model suggests the following: Expectancies about agency for an event influence the formulation of questions in an interview situation. If no such expectancies are present, then an incidental and unintentional sequence of question formulations that imply unidirectional causal agency may in itself give rise to the establishment of an expectancy. So, if one accidentally or unintentionally starts with a question such as "Did you dance with him on that evening?" and receives "Yes" for an answer, then this in itself may trigger an expectancy about the person's agentive role in the entire incident, thus channelling further questions formulations that favour this interpretation of the event.

In the second step, the answers of the respondent are systematically shaped by the verb type used in question formulation (De Poot & Semin, 1995; Semin, Rubini & Fiedler, 1995). In the third step, the question of whether third parties' impressions of agency for a social event are influenced systematically by the type of question that prompted the answer. Our earlier research shows that this is the case (Semin & De Poot, *in press*). Moreover, we find that targets are completely unaware of this influence. This lack of awareness means that the respondent is unprotected from the operation of self-fulfilling prophecies—at least as far as

linguistic behavior is concerned. Thus, linguistic behavior can be seen as shaping the answers of a respondent, which in turn leads to the shaping of impressions and judgments by interviewers or third parties.

The unique quality of theoretical and research contributions made by the investigation of linguistic behavior is that they identify the properties of the medium (i.e., language) that is common to all types of communicative context. The framework developed here extends, in principle and practice, to any domain where people engage in question-answer exchanges about who did what, to whom, and when. Such situations range from interviews about jobs, clinical issues, and legal issues to everyday conversation. The cumulative framework developed with the Question-Answer paradigm (De Poot & Semin, 1995; Semin & De Poot, in press; Semin, Rubini & Fiedler, 1995) differs from the research on social hypothesis testing (Trope & Liberman, 1996) in one distinctive way: Social hypothesis testing research relies primarily on the content of questions. Most researchers have studied the applicability or inapplicability of personality traits or social category membership (e.g., Devine, Hirt, & Gehrke, 1990; Evett, Devine, Hirt & Price, 1994; Skov & Sherman, 1986; Semin & Strack, 1980; Snyder & Swann, 1978). Such an approach is essentially concerned with the strategies people adopt to elicit information in order to decide the truth value of a content referent issue (trait applicability, social category membership, etc.). There is no doubt that information content is important and that the research conducted within this framework has been invaluable in advancing our knowledge. Content is critical in any instance of hypothesis testing and the research that has been conducted with the Question-Answer paradigm complements this work by suggesting the operation of subtle, implicit, and influential linguistic biases that are independent of specific contents and can enter hypothesis testing strategies across a wide variety of domains. The Question-Answer paradigm identifies some of properties of the medium (language) that is used in the investigation of hypotheses and explicates how these properties can be used to afford particular outcomes. While the semantic content or the information value of the surface meaning of any question is very important, the particular properties of such contents have to be rediscovered afresh for each domain. In the case of a car accident the choice of the verbs of action such as "bump, collide and smash" may be critical in the formulation (or framing) of questions (e.g., Loftus, 1975; Loftus & Palmer, 1974) and may influence immediate and delayed recall. But one has to think creatively about what types of verb contents would be appropriate to frame questions about a fight, a wife-bashing incident, or a heated exchange in a seminar. In the case of the Question-Answer paradigm one knows that verbs of action and

verbs of state have generic properties that are meta-semantic (cf. Semin, 1997) and apply across domains.

Finally, the Question-Answer paradigm (Semin, Rubini & Fiedler, 1995) also allows one to engage in a reverse analysis, to infer why people prefer particular question formulations over others. Thus, understanding the uses of interpersonal language not only highlights how one can achieve particular ends by their use, but also serves as a diagnostic tool to uncover the expectations or motives of the interviewer. Such a possibility promotes a clearer appreciation of the uses that language can serve (Semin, 1997). The research reported in this paper and the implications drawn from it provide a framework for the analysis of natural conversations or interviews to investigate the motives of an interviewer, as well as the predicament of the interviewee. If the wording of questions and the choice of questions are indicators of partiality, then unreflected responding to such questions can have unsettling consequences.

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